

April 19, 2011 Water Supply Forecast Discussion

This forecast includes observed conditions through the morning of April 19, 2011.
<http://cdec.water.ca.gov/cgi-progs/iidir?s=b120up>

Forecast Summary:

The projected median April-July runoff now ranges from 127 percent (Shasta Lake, Total Inflow) to 182 percent (Kern River). The forecasts reflect drier than normal precipitation, in most basins, since the last update. The Yuba River forecast showed the largest gain (2 percent of average) and the Kaweah River forecast showed the largest decrease (4 percent of average). No increases in the forecast were made for rivers from the American River southward. Only the Feather and Yuba river forecasts increased.

Runoff:

For all rivers forecasted in this update, the current April unimpaired runoff rates (through the 19th) are above 120 percent of the monthly average. For April, all rivers from the American River southward, except for the Merced River, are flowing at rates greater than 160 percent of average. For the Cosumnes, Tule, and Kern rivers, the flow rates are greater than 200 percent of average.

Precipitation:

As of April 18th, the Northern Sierra 8-Station Index reflects an April total of 1.2 inches (31 percent of the April average) and a seasonal total of 62.2 inches, which is 142 percent of average-to-date and 124 percent of an average water year. The San Joaquin 5-Station Index shows a monthly total of 0.9 inches (26 percent of the April average) and a seasonal total of 56.9 inches, which is 160 percent of average-to-date and 139 percent of an average water year.

Snowpack:

According to this morning's (April 21th) snow sensor data, statewide snowpack stands at 43 inches (150 percent of the April 1 average and 168 percent of average-to-date). This is a 5 inch loss since April 1. Last year, the sensor data indicated a gain of 2 inches during the first 21 days of April.

As of April 21, 2011, the Northern Sierra, Central Sierra, and Southern Sierra snowpack is 188, 160, and 159 percent of normal-to-date.

Weather and Climate Outlooks:

The NWS Climate Prediction Center's (CPC) 30-day outlook for May, produced April 21st, indicates a slight chance of above normal temperatures over the southern Sierra and equal chances of above or below normal temperatures elsewhere. The precipitation forecast for this period indicates below normal precipitation from about the Merced River southward and equal chances of above or below normal precipitation elsewhere in the Sierra.

The CPC 3-month outlook for May-July, also produced April 21, indicates increased chances of above normal temperatures over the southeastern corner of the state. Over this period, equal chances of above or below normal precipitation is expected over all of California.

The CNRFC 6-day QPF and Freezing Level Forecast, issued this morning, indicates light precipitation (less than ¼ inch) over the Sierra today. A return of showers is expected on Sunday when less than 0.4

inches are expected to accumulate on Sunday and Monday over the northern Sierra. During these days, no precipitation is expected over the central and southern Sierra.

Currently, the freezing level over the northern Sierra ranges from about 6000 to 7000 feet. Over the central and southern Sierra, the freezing levels vary from 7000 to 9000 feet.

These conditions are expected to persist through Monday. On Tuesday, however, a warmer pattern develops that is expected to raise the freezing levels 2000 to 3000 feet over all of the Sierra.

Next Update:

The next Bulletin 120 forecast update will be produced for conditions on April 26, 2011, and will be available by Thursday, April 28, 2011. If you need guidance before then, or have any questions, please contact us:

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Important Links**Full Natural Flow Data:**

Daily FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FLOWOUT

Precipitation Data:

Northern Sierra 8-Station Precipitation Tabulation Table

http://cdec.water.ca.gov/cgi-progs/products/8-Stations_Tab.pdf

San Joaquin 5-Station Precipitation Tabulation Table

http://cdec.water.ca.gov/cgi-progs/products/5-Stations_Tab.pdf

2011 WY Precipitation Summary

<http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM>

Snow Data:

Latest Snow Sensor Report

<http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>

Latest Statewide Summary of Snow Water Equivalents

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Monthly Snow Course Report

<http://cdec.water.ca.gov/cgi-progs/snow/COURSES>

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php>

Climate Prediction Center One-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/30day/>

Climate Prediction Center Three-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/90day/>

Drought Information:

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.htm